HistoricBridges.org - National Bridge Inventory Data Sheet

2011 Inventory

The National Bridge Inventory contains data submitted by state transportion departments to the Federal Highway Administration in coded format.
Form Interface Design: www.historicbridges.org. Data Conversion Assistance By www.bridgehunter.com. None of the involved parties make any guarantee of accuracy.

Basic Information

Ohio [39]	Cuyahoga County [035]	Cleveland [16000]	W OF MERWIN AVE (FLATS)	41-29-39 = 41.494167	081-42-12 = -81.703333

1869345	Highway agency district	12	Owner	City or Municipal Highway Agency [04]	Maintenance responsibility	City or Municipal Highway Agency [04]

Route	#Num!		CENTER STREET	Toll	On free road [3]

Features intersected: CUYAHOGA RIVER

Design - main	Steel [3]	Design - approach	Steel [3]	Kilometerpoint	0 km = 0.0 mi
2	Movable - Swing [17]	1	Stringer/Multi-beam or girder [02]	Year built	1901
				Year reconstructed	1989
				Skew angle	0
				Structure Flared	
				Historical significance	Bridge is eligible for the NRHP. [2]

Total length	105.2 m = 345.2 ft	Length of maximum span	44.2 m = 145.0 ft	Deck width, out-to-out	12.2 m = 40.0 ft	Bridge roadway width, curb-to-curb	7.3 m = 24.0 ft

Inventory Route, Total Horizontal Clearance	7.3 m = 24.0 ft	Curb or sidewalk width - left	1.6 m = 5.2 ft	Curb or sidewalk width - right	1.6 m = 5.2 ft

Deck structure type	Open Grating [3]
Type of wearing surface	Other [9]
Deck protection	
Type of membrane/wearing surface	

Weight Limits

Bypass, detour length	Method to determine inventory rating	Allowable Stress(AS) [2]	Inventory rating	32.4 metric ton = 35.6 tons
0.3 km = 0.2 mi	Method to determine operating rating	Allowable Stress(AS) [2]	Operating rating	35 metric ton = 38.5 tons
	Bridge posting	Equal to or above legal loads [5]	Design Load	M 13.5 / H 15 [2]

Functional Details

Average Daily Traffic	4500	Average daily truck traffi	11 %	Year	1975	Future average daily traffic	6246
Year	2028						
Road classification	Collector (Urban) [17]	Lanes on structure	2	Approach roadway width	11 m = 36.1 ft		
Type of service on bridge	Highway [1]	Direction of traffic	2 - way traffic [2]	Bridge median			
Parallel structure designation	No parallel structure exists. [N]						
Type of service under bridge	Waterway [5]	Lanes under structure	0	Navigation control	Navigation control on waterway (bridge permit required). [1]		
Navigation vertical clearanc	5.5 m = 18.0 ft	Navigation horizontal clearance	34.4 m = 112.9 ft				
Minimum navigation vertical clearance, vertical lift bridge		Minimum vertical clearance over bridge roadway	4.57 m = 15.0 ft				
Minimum lateral underclearance reference feature	Feature not a highway or railroad [N]						
Minimum lateral underclearance on right	0 = N/A	Minimum lateral underclearance on left	0 = N/A				
Minimum Vertical Underclearance	0 = N/A	Minimum vertical underclearance reference feature	Feature not a highway or railroad [N]				
Appraisal ratings - underclearances	N/A [N]						

Repair and Replacement Plans

Type of work to be performed

Work done by

Bridge improvement cost

Roadway improvement cost

Length of structure improvement

Total project cost

Year of improvement cost estimate

Border bridge - state

Border bridge - percent responsibility of other state

Border bridge - structure number

Inspection and Sufficiency

Structure status	Open, no restriction [A]	Appraisal ratings - structural	Equal to present minimum criteria [6]
Condition ratings - superstructur	Satisfactory [6]	Appraisal ratings - roadway alignment	Equal to present desirable criteria [8]
Condition ratings - substructure	Good [7]	Appraisal ratings - deck geometry	Basically intolerable requiring high priority of replacement [2]
Condition ratings - deck	Satisfactory [6]		
Scour	Countermeasures have been installed to mitigate an existing problem with scour. [7]		
Channel and channel protection	Not applicable. [N]		
Appraisal ratings - water adequacy	Superior to present desirable criteria [9]	Status evaluation	Functionally obsolete [2]
Pier or abutment protection	In place and functioning [2]	Sufficiency rating	73.2
Culverts	Not applicable. Used if structure is not a culvert. [N]		
Traffic safety features - railings	Inpected feature meets currently acceptable standards. [1]		
Traffic safety features - transitions			
Traffic safety features - approach guardrail			
Traffic safety features - approach guardrail ends			

Inspection date	October 2008 [1008]	Designated inspection frequency	12	Months	
Underwater inspection	Unknown [Y00]			Underwater inspection date	June 1989 [0689]
Fracture critical inspection	Every year [Y12]			Fracture critical inspection date	January 1996 [0196]
Other special inspection	Not needed [N]			Other special inspection date	

District: **12** County **CUYAHOGA**
(101) Location: **W OF MERWIN AVE (FLATS)** (102) Facility Carried: **CENTER STREET**
(2)FIPS Code: **CLEVELAND** (103) Route On Bridge: **MUNICIPAL** (104) Route Under Bridge: **OTHER**
(9) Direction of Traffic: **2-WAY TRAFFIC** (10) Temporary: **N** (11)Truck Network: **N** (12)Parallel: **N**
(95) Insp: **CITY/LOCAL** (96) Maint: **CITY/LOCAL** (97) Routine: **CITY/LOC** (100) Type Serv: (On): **HIGHWAY** (Under): **WATERWAY**

Inventory Route Data

(3) Route On/Under: **ON** Hwy Sys: **MUNICIPAL STREET**
Route No.: **CENTR** Dir: Des: **BUSINESS** Pref:
(4) Feature Intersected: **CUYAHOGA RIVER**
(5) County: **CUY** Mileage: **1003M** Special Desig:
(6) Avg. Daily Traffic(ADT): **4,500** (7) ADT Year: **1975**
(8) Truck Traf: **500** (14) NHS: **NO - X** (15) Corridor: **N**
(16) Functional Class: **COLLECTOR-URBAN** (19) Strahnt: **Not Applicable**

Intersected Route Data

(22) Route On/Under: Hwy Sys:
Route No.: Dir: Des: Pref:
(23) Feature Intersected:
(24) County: Mileage: Special Desig:
(25) Avg. Daily Traffic(ADT): **0** (26) ADT Year:
(27) Truck Traf: **0** (28) NHS: - (29) Corridor:
(30) Functional Class: (36) Strahnt: **Not Applicable**

Clearance On the Bridge

(154) Min Hriz on Bridge: NC: **0.0** Ft Card: **24.0** Ft
(155) Prac Max Vert On Brg: **15.0** Ft
(67) Min Vrt Clr On Brg: NC: **0.0** Ft Card: **15.0** Ft
(80) Min Latl Clr: NC: **0.0 / 0.0** Ft Card: **0.0 / 0.0** Ft
(81) Vrt Clr Lft: **0.0** Ft

Structure Information

(38) Bypass Length: **02** Miles
(39) Latitude: **41 Deg 29.7 Min** Longitude: **81 Deg 42.2 Min**
(40) Toll: **ON FREE ROAD**
(41) Date Built: **07/01/1901** (42) Major Rehabilitation: **01/01/1989**
(43) No. Lanes On: **2** No. Lanes Under: **0**
(44) Horiz Curve: **Deg. Min.** (45) Skew: **0** Deg
(49) App. Rdw Width: **36** Ft (50) Brg. Rdw Width: **24.0** Ft
(51) Deck Width: **40.0** Ft Deck Area: **13799** Sq. Ft
(52) Median Type: **NONE / NON BARRIE / NO JOINT**
(53) Bridge Median: **NO MEDIAN**
(54) Sidewalks: (left) **5** Ft (right) **5** Ft
(55) Type Curb or Sidewalks:
(Left) Matl: **STEEL** Type: **SIDEWALK(>2')**
(Right) Matl: **STEEL** Type: **SIDEWALK(>2')**
(56) Flared: **N** (57) Composite: **non-composite**
(58) Railing: **STEEL POST & STEEL PANEL (DECORATIVE)**
(59) Deck Drainage: **DRN TROUGH UNDR OPEN JNTS**
(60) Deck Type: **STEEL GRID - OPEN**
(61) Deck Protection: External: **NONE**
Internal: **NONE**
(62) Wearing Surface: **OTHER**
Thickness: **0.0** in (119) Date of Wearing Surface:
Slope Protection: **NONE-NATURAL PROTECTION(GRASS,BUSHES)**

(63) Main Spans Number: **2** Type: **STEEL / TRUSS / MOVABLE - SWIN**
Approach Spans Number: **1** Type: **STEEL / BEAM / SIMPLE SPAN**
Total Spans: **3** (65) Max Span: **145** Ft (66) Overall Leng: **345** Ft

(70) Substructure	(71) Foundation and Scour Information	
Abut-Rear Matl: **CONCRETE AND STONE**	Type: **GRAVITY**	Fnd: **CIP REINF CONCRETE PILES(OTHER DIAMETER)**
Abut-Fwd Matl: **CONCRETE AND STONE**	Type: **GRAVITY**	Fnd: **CIP REINF CONCRETE PILES(OTHER DIAMETER)**
Pier-Pred Matl: **STEEL AND CONCRETE**	Type: **CAPPED COLUMN**	Fnd: **CIP REINF CONCRETE PILES(OTHER DIAMETER)**
Pier-Other Matl: **CONCRETE AND STONE**	Type: **STUB GRAVITY**	Fnd: **CIP REINF CONCRETE PILES(OTHER DIAMETER)**
Pier-Other Matl: **NONE**	Type: **NONE**	Fnd: **OTHER**
No of Piers Predominate: **01**	Other: **01**	Other: **NN**

(86) Stream Velocity: **000.0** (74) Scour: **COUNTERMEAS INSTALLED TO CORRECT PROBLEM**
(189) Dive: **Y Freq: 0** Probe: **N** Freq: **0** (75) Chan Prot: **SHEET PILING**
(189) Date of last Dive Insp: **06/01/1989** (152) Drainage Area: **UUU** Sq Mi

Clearance Under the Bridge

(156) Min. Horiz Under Clear: NC: **0.0** Ft Card: **0.0** Ft
(157) Prac Max Vrt Under Clear: **12.0** Ft
(77) Min Vert Under Clear: NC: **0.0** Ft Card: **12.0** Ft
(78) Min Lat Under Clear: NC: **0.0 / 0.0** Ft Card: **0.0 / 0.0** Ft

Load Rating Information

(48) Design Load: **H/15**
(83) Operating: **39** Ton
Inventory: **36** Ton
Ohio Percent of Legal Load **150**
Year of Rating: **1989**
(84) Analysis: **WORKING STRESS (WS)**
(85) Rate Soft: **NO SOFTWARE USED** Analyzed by:
Analysis on Bars: **NOT ON BARS [DEFAULT]**

(88-89) Appraisal

(Including calculated Items)
(88) Waterway Adequacy **9**
(89) Approach Alignment **8**
Calc Gen Appraisal: **6**
Calc Deck Geometry: **2**
Calc Underclearance: **N**

Approach Information

(109) Approach Guardrail: **OTHER**
(110) Approach Pavement: **CONCRETE** (111) Grade: **GOOD**

Culvert Information

(131) Culvert Type: **NONE/NOT APPLICBLE** (127) Length: **0.0** Ft
(129) Depth of Fill: **0.0** Ft (130) Headwalls: **NONE**

General Information

(121) Main Member **RIVETED BUILT-UP STEEL** (122) Moment Plate: **NONE**
(169) Expansion Joint: **OPEN (ARMORED)**
(124) Bearing Devices: **ROLLERS/NONE**
(126) Navigation: **Control- Y** Vert Clr: **18.0** Ft Horiz Clear:: **113.0** Ft
(193) Spec Insp: **N** Freq: **0** Date:
(188) Fracture Critical Insp: **Y** Freq: **12** Date: **1996-01-22**
(138) Long Member: **TWO TRUSSES (RIVETED)** (135) Hinges: **OTHER**
(141) Structural Steel Memb: **UNKNOWN** (139) Framing: **NONE**
Railing: **UNKNOWN**
Pay Wt: **0** pounds Prime Loc: **UNKNOWN** Paint: **OTHER**
Bridge Dedicated Name:

General Information (Continued)

(---) Hist Significance: **NON-REGISTERED HISTORIC BRIDGE** (69) NBIS: **Y**
(---) Hist Builder: **KING BRIDGE COMPANY** Hist Build Year: **1901**
(69) Hist Type: **RIM BEARING**
(161) Special Features (see below):
(105) Border Bridge State: Resp % (106) SFN:

Proposed Improvements

(90) Type Work: **-**
(90) Length: Ft
(90) Bridge Cost ($1000s): **0**
(90) Roadway Cost ($1000s): **0**
(90) Total Project Cost ($1000s): **0** (90) Year:
(91) Future ADT (On Bridge): **0** (92) Year of Future ADT: **2028**

Programming Info

PID Number:
PID Status:
PID Date:

Original Plans Information

(142) Fabricator:
(143) Contractor:
(144) Ohio Original Construction Project No.:
(---) Microfilm Reel:
(151) Standard Drawing:
Aperture Cards: Orig: **N** Repair: **N** Fabr: **N**
Plan Information Available: **1PLAN INFORMATION AVAILABLE**

(153) Repair Projects

1. **/ 020**	2. **/ MMM**	3. **/ 020**
4.	5.	6.
7.	8.	9.
10.		

Inspection Summary

(I-8) Deck:	**6**
(I-32) Superstructure:	**6**
(I-42) Substructure:	**7**
(I-50) Culvert:	
(I-54) Channel:	**8**
(I-60) Approaches:	**7**
(I-66) General Appraisial:	**6**
(I-66) Operational Status:	**A**
Inspection Date:	**09/20/2011**
(94) Desig Insp Freq:	**12 Months**

(I-69) Survey Items

Railings:	**1 MEETS CURRENT STANDARDS**
Transitions:	**0 DOES NOT MEET CURRENT STANDARDS**
Guardrail:	**0 DOES NOT MEET CURRENT STANDARDS**
Rail Ends:	**0 DOES NOT MEET CURRENT STANDARDS**
In Depth:	**N NONE N/A**
Fracture Critical:	**N NONE N/A**
Scour Critical:	**N NONE N/A**
Critical Findings:	**N NONE N/A**
Insp. Update Date:	**01/17/2012**

Utilities

(46) Electric:	**U**
Gas:	**U**
Sanitary Sewer:	**U**
Telephone:	**U**
TV Cable:	**U**
Water:	**U**
Other:	**U**

Special Features

(161) Lighting:	**N**
Fencing:	**N**
Glare-Screen:	**N**
Splash-Guard:	**N**
Catwalks:	**N**
Other-Feat:	**U**
(184) Signs-on:	**N**
Signs-Under:	**N**
(162) Fence-Ht:	**0.0** Ft
(163) Noise Barr:	**N**

SFNs Replacing this retired bridge: **-**
SFNs That where replaced by this bridge: **-**
This bridge was retired and copied to:
The bridge was copied from:

INV Field Bridge Marker: **CUY-CENTR-1003M-**
INT Field Bridge Marker: **---**

PONTIS CoRe elements and Condition States

Elem No.	CoRe Element Description	Total Quantity	Unit Meas.	Condition State Percents(*)				
				1	2	3	4	5
		0						

(*) Percentages Should add to 100%

STATE OF OHIO DEPARTMENT OF TRANSPORTATION

BRIDGE INSPECTION REPORT

BR-86 REV 02-95

1 8 6 9 3 4 5
1 Structure File Number 7

Bridge Number **CUY** (CO) **CENTR1003M** (ROUTE) (UNIT) **CLEVELAND** **Date Built 07/01/1901 - 1989**

District **12** Bridge Type **STEEL/TRUSS/MOVABLE - SWIN** Type Service **1** **15 CUYAHOGA RIVER** **CUY**

DECK Out/Out 40.0		2		THCK = 0.0	2
1. Floor 5-STEEL GRID - OPEN 8			2. Wearing Surface 0-OTHER 41		
2-STEEL		2	W.S. Date =		
3. Curbs, Sidewalks, Walkways 2-STEEL 9			4. Median 42		
5. Railing 6-STEEL POST & STEEL PAN 10		2	6. Drainage 5-DRN TROUGH UNDR OPEN J 43		
7. Expansion Joints 5-OPEN (ARMORED) 11		1	**8. Summary** 44		6
SUPERSTRUCTURE MAX.SPAN=145		1			2
9. Alignment 12			10. Beams/Girders/Slab 2-RIVETED BUILT-UP STEEL 45		
TOT.LGTH=345		2			2
11. Diaphragms or Crossframes 13			12. Joists/Stringers 46		
13. Floor Beams 14		2	14. Floor Beam Connections 47		2
15. Verticals 15		2	16. Diagonals 48		2
17. End Posts 16		1	18. Top Chord 49		1
19. Lower Chord 17		1	20. Lower Lateral Bracing 50		
21. Top Lateral Bracing 18			22. Sway Bracing 51		1
23. Portals 19		1	1-ROLLERS		2
			24. Bearing Devices N-NONE 52		
25. Arch 20			26. Arch Columns or Hangers 53		
27. Spandrel Walls 21			TYPE = 0-OTHER 28. Protective Coating System DATE = 01/01/1989 54		3
29. Pins/Hangers/Hinges 22		2	30. Fatigue Prone Connections 55		1
31. Live Load Response 23		S	**32. Summary** 56		6
SUBSTRUCTURE 3-CONCRETE AND STONE		2	PIERS=2 SPANS = 2		1
33. Abutments 3-CONCRETE AND STONE 24			34. Abutment Seats 57		
35. Piers TYPE = 7-STEEL AND CONCRETE 25		1	36. Pier Seats 58		1
37. Backwalls 26		2	ABUTMENT:=CIP REI / CIP REI 38. Wingwalls 59		1
39. Fenders and Dolphins 27		2	40. Scour 7-COUNTERMEAS INSTALLED 60	2	1
41. Slope Protection N-NONE 28			**42. Summary** DIVE DT=06/01/1989 62		7
CULVERTS					
43. General 29			44. Alignment 63		
45. Shape 30			46. Seams 64		
47. Headwalls or Endwalls 31			48. Scour 65		
49. 32			50. Summary 66		
CHANNEL		1	3-SHEET PILING		1
51. Alignment 33			52. Protection 67		
53. Waterway Adequacy 34		1	**54. Summary** 68		8
APPROACHES		2			1
55. Pavement 1-CONCRETE 35			56. Approach Slabs 69		
57. Guardrail 0-OTHER 36		2	58. Relief Joints 70		
59. Embankment BRDG.WIDTH=24.0 37		1	**60. Summary** PCT.LEGAL=150 71		7
GENERAL		4	ROUTINE.RESP: 4-CITY/LOCAL		1
61. Navigation Lights 38			62. Warning Signs MAINT.RESP: 4-CITY/LOCAL 72		
MVC ON=15.0 UND=0000		1			1
63. Sign Supports 39			64. Utilities 73		
65. Vertical Clearance 40		1	**66. General Appraisal & Operational Status** 74	COND 6	STAT A

67. INSPECTED BY

SIGNED

76 PE

J D
78 INITIALS

68. REVIEWED BY

SIGNED

7 0 8 9 0
81 PE

J H
83 INITIALS

DOT 2852

DECK AREA 13,799

Date 0 9 2 0 1 1

1 0 0 0 N N N N

Date 1 2 0 8 1 1

STATE OF OHIO DEPARTMENT OF TRANSPORTATION

BRIDGE INSPECTION REPORT

BR-86 REV 02-95

1	8	6	9	3	4	5

1 Structure File Number 7

Bridge Number **CUY** (CO) **CENTR** (ROUTE) **1003M** (UNIT)

Date Built 07/01/1901 - 1989

District **12** Bridge Type **STEEL/TRUSS/MOVABLE - SWIN**

Type Service **1** **1** **5**

CUYAHOGA RIVER

00 NO REMARKS FOUND FOR THIS INSPECTION.